

What is claimed is:

1. A rod end device 10 for a motor vehicle, said device comprising: a ball 12 having an outer surface 14, said ball 12 defining a supporting bore 16 that extends through said ball 12; a race 18 for bearingly supporting said ball 12, said race 18 defining a groove 20 which is in fluid communication with said outer surface 14 of said ball 12; a rod end 22 for supporting said race 18, said rod end 22 defining a channel 24 which is in fluid communication with said groove 20; and a one way valve 26 connected to said channel 24 for supplying lubricant L to said channel 24.
2. A rod end device as set forth in claim 1 wherein said ball 12 is fabricated from steel.
3. A rod end device 10 as set forth in claim 1 wherein said ball 12 is of generally spherical configuration, said ball 12 having a longitudinal axis A extending therethrough, said ball 12 defining a planar surface 27 formed by the removal from the ball 12 of an end cap through which said longitudinal axis A extends, said ball 12 defining a further planar surface 29 disposed diametrically opposite relative to said planar surface 27, said further planar surface 29 being formed by the removal from the ball 12 of a further end cap through which said longitudinal axis A extends.
4. A rod end device 10 as set forth in claim 3 wherein said supporting bore 16 is of cylindrical configuration, said supporting bore 16 having a longitudinally extending axis coextending with said longitudinal axis A of said ball 12.
5. A rod end device 10 as set forth in claim 1 wherein said race 18 is fabricated from bronze.
6. A rod end device 10 as set forth in claim 1 wherein said race 18 defines a socket cavity 31 for the rotatable reception therein of said ball 12.
7. A rod end device 10 as set forth in claim 6 wherein said socket cavity 31 and said outer surface 14 of said ball 12 define therebetween a clearance C which permits rotation of said ball 12 within said socket cavity 31 and for the application thereto of a thin film of the lubricant L.
8. A rod end device 10 as set forth in claim 1 wherein said groove 20 of said race 18 includes: an inlet portion 33; an annular portion 35 extending from said inlet portion 33, said annular portion 35 extending around said outer surface 14 of said ball 12, said annular portion 35 permitting the lubricant L to flow from said inlet portion 33 to said outer surface 14 of said ball 12.
9. A rod end device 10 as set forth in claim 4 wherein said groove 20 of said race 18 includes: an inlet portion 33; an annular portion 35 extending from said inlet portion 33, said annular portion 35 extending around said outer surface 14 of said ball 12, said

annular portion 35 permitting the lubricant L to flow from said inlet portion 33 to said outer surface 14 of said ball 12, said annular portion 35 being disposed coaxially relative to said supporting bore 16.

10. A rod end device 10 as set forth in claim 1 wherein said rod end 22 includes: a pipe 37 having a first 39 and a second end 41, said pipe 37 defining said channel 24 which has a first and a second extremity 43,45, said first end 39 of said pipe 37 being fastened to said race 18 such that said first extremity 43 of said pipe 37 is in fluid communication with said race 18.

11. A rod end device 10 as set forth in claim 8 wherein said rod end 22 includes: a pipe 37 having a first and a second end 39,41, said pipe 37 defining said channel 24 which has a first and a second extremity 43, 45, said first end 39 of said pipe 37 being fastened to said race 18 such that said first extremity 43 of said pipe 37 is in fluid communication with said annular portion 35 of said race 18.

12. A rod end device 10 as set forth in claim 11 wherein said first end 39 of said pipe 37 defines an eye 47 for the rigid reception therein of said race 18 such that when said race 18 is disposed within said eye 47, said inlet portion 33 is aligned relative to said first extremity 43 of said channel 24 such that lubricant L within said channel 24 flows through said first extremity 43 of said channel 24 through said inlet portion 33 and around said annular portion 35 for lubricating said outer surface 14 of said ball 12.

13. A rod end device 10 as set forth in claim 12 wherein said one way valve 26 is sealingly disposed adjacent to said second end 41 of said pipe 37 for supplying the lubricant L to said channel 24.

14. A rod end device 10 as set forth in claim 1 further including: a tube 28 having a first and a second end 30,32, said tube 28 defining a cavity 34 which extends between said first end 30 and said second end 32 of said tube 28, said first end 30 of said tube 28 sealingly cooperating with said rod end 22 such that said cavity 34 is disposed in fluid communication with said channel 24 so that a flow of lubricant L disposed within said cavity 34 to said outer surface 14 of said ball 12 is permitted.

15. A rod end device 10 as set forth in claim 14 further including: a plug 36 disposed within said cavity 34 for inhibiting flow of the lubricant L from said second end 32 of said tube 28.

16. A rod end device 10 as set forth in claim 15 wherein said one way valve 26 is disposed between said plug 36 and said first end 30 of said tube 28 for supplying the lubricant L to said cavity 34.

17. A rod end device 10 for a motor vehicle, said device comprising: a ball 12 having an outer surface 14, said ball 12 defining a supporting bore 16 that extends through said ball 12; a race 18 for bearingly supporting said ball 12, said race 18 defining a groove 20 which is in fluid communication with said outer surface 14 of said ball 12; a rod end 22

cavity 34 is disposed in fluid communication with said channel 24 so that a flow of lubricant L disposed within said cavity 34 to said outer surface 14 of said ball 12 is permitted; a plug 36 disposed within said cavity 34 for inhibiting flow of the lubricant L from said second end 32 of said tube 28; and said one way valve 26 being disposed between said plug 36 and said first end 30 of said tube 28 for supplying the lubricant L to said cavity 34.